IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY

NEW JERSEY-AMERICAN WATER COMPANY, INC., **Plaintiff,** **v.** **E. I. DUPONT DE NEMOURS & CO. and THE CHEMOURS COMPANY,** **Defendants**	**Civil No.:** **COMPLAINT**

New Jersey-American Water Company, Inc. ("NJAW" or "Plaintiff") files this Complaint against the Defendants named herein and in support thereof alleges as follows:

SUMMARY OF THE CASE

1. NJAW, which operates a public water supply system in Salem County, New Jersey, brings this action for contribution and reimbursement of costs incurred and which continue to be incurred to address the presence of perfluorochemicals ("PFCs")[1] that Defendants E.I. DuPont de Nemours & Co. ("DuPont") and its subsidiary, The Chemours Company ("Chemours") (collectively "Defendants"), have discharged or are otherwise responsible for, from the Chambers Works facility, also located in Salem County. Defendants knew that PFCs present unreasonable risks to human health and the environment and of the dangers associated with these compounds. Yet, Defendants handled, discharged and were otherwise responsible for the release of PFCs into the environment without sufficient containment or caution. Defendants'

[1] As a class of chemicals, PFCs may also be referred to as: Perfluorochemicals, Perfluoroalkyls, Perfluorinated alkyl acids, Polyfluorinated chemicals, Polyfluorinated compounds, and Polyfluoroalkyl substances ("PFAS"). Nat'l Institute of Health (2016).

acts and omissions resulted in the presence of these compounds in the groundwater that is the source of the Penns Grove public supply well system in Salem County. As a result of the occurrence of PFCs in groundwater from Defendants' discharges, NJAW was required to fund and implement capital improvements as well as incur ongoing operation and maintenance costs in order to remove and treat for the presence of these hazardous substances where they are present above state and federal guidelines.

JURISDICTION AND VENUE

1. This Court has subject matter jurisdiction under federal diversity, pursuant to 28 U.S.C. § 1332, as the parties are completely diverse and the amount-in-controversy exceeds $75,000.

2. Venue is proper in this District under 28 U.S.C. § 1391 because a substantial part of the events giving rise to this Complaint occurred in this District.

PLAINTIFF

3. Plaintiff NJAW is a New Jersey corporation with its principal place of business at 1025 Laurel Oak Road, Voorhees, New Jersey, 08043. NJAW, which provides services to an estimated 2.7 million New Jersey customers, is a direct, wholly owned subsidiary of American Water Works Company, Inc., the largest publicly traded water and wastewater utility company in the United States.

4. NJAW owns and operates the Penns Grove public supply well system located in Salem County ("Penns Grove System") with Public Water Supply Identification ("PWSID") Number NJ1707001.

5. The Penns Grove System serves the Borough of Penns Grove, Carney's Point Township, Pedricktown, and a portion of Oldmans Township.

6. The Penns Grove System is a public community water system consisting of seven wells that draw from the Potomac-Raritan-Magothy ("PRM") Aquifer. This System may receive additional supply through an interconnection with NJAW's Logan System, which consists primarily of PRM groundwater, but may also include treated surface water from the Delaware River.

7. NJAW closed on its purchase of the Penns Grove System from Pennsgrove Water Supply Company, through its parent company SJ Services, Inc., on November 1, 2007.

DEFENDANTS

8. Defendant DuPont is a Delaware corporation authorized to conduct business in New Jersey and maintains a principal place of business at 1007 Market Street, Wilmington, Delaware, 19898.

9. DuPont is the owner and operator of the approximately 1,445 acre Chambers Works facility located in Salem County, New Jersey that began operations in 1917 and continues operations to this day.

10. Defendant Chemours is a Delaware corporation authorized to conduct business in New Jersey with its principal place of business at 1007 Market Street, Wilmington, Delaware. Chemours was a subsidiary of DuPont until July 1, 2015, when Chemours began operating independently from DuPont.

11. The property upon which the Chambers Works facility is sited was transferred to Chemours in 2014.

12. Chemours currently manages the remedial obligations at the Chambers Works facility.

PERFLUOROCHEMICALS

13. PFCs are a family of manmade chemicals that have been used for decades to make products that resist heat, oil, stains, grease and water.

14. In the 1940s and 1950s, The 3M Co. ("3M") began creating PFCs and incorporating them in their products after recognizing their surfactant properties.

15. In the 1950s, DuPont purchased one of the PFC chemicals produced by 3M: perfluorooctanoic acid ("PFOA"). At that time, Dupont was instructed that the chemical should be incinerated or disposed of at a proper chemical waste facility.

16. Rather than disposing of PFOA at a proper chemical waste facility, DuPont instead disposed of the chemical into the Delaware River and unlined landfills and digestion ponds throughout the Chamber Works facility.

17. DuPont had known since as early as the 1960s that PFOA was likely dangerous to human health. During this period, DuPont was also aware that PFOA had adverse effects on rat and dog livers.

18. By the 1970s, 3M shared additional information about toxicity among rats and monkeys.

19. In the 1970s, DuPont tested for and found high concentrations of PFOA in its workers' bloodstreams.

20. In 1981, DuPont obtained information that PFOA could cross the placenta in humans.

21. DuPont was also aware in the 1980s that it was contaminating the local groundwater at levels higher than what its own scientists claimed was safe.

22. In 1991, DuPont set an internal safety limit for PFOA concentration in drinking water at 1 parts per billion ("ppb"), which is well below the levels currently recommended by the federal and various state governments.

23. The acts and omissions of DuPont at the Chambers Works facility have resulted in discharges of PFOA and other hazardous substances that have contaminated the drinking water source for Plaintiff's Penns Grove water supply system.

24. PFCs have been used in a wide range of industrial applications and consumer products including oil-, stain- heat-, and water-resistant materials such as clothing (*i.e.*, GORE-TEX®), carpeting (*i.e.,* Scotchguard™), lubricants, furniture, food packaging (*i.e.*, popcorn bags), flooring (*i.e.,* Stainmaster™), non-stick cookware (*i.e.,* Teflon®), stain/water resistant paint, and roofing materials. U.S. Environmental Protection Agency ("EPA") (2013).

25. PFCs are also used in products to help them flow freely; these products include paints, cleaning products, and certain firefighting foams called aqueous film-forming foams ("AFFFs") that are used to fight fuel-based fires.

26. Due to their strength of multiple carbon-fluorine bonds, PFC compounds break down slowly, if at all, in industrial use and the environment.

27. Certain PFCs, such as perfluorooctane sulfonate ("PFOS") and PFOA (which is also known as "C8"[2]), have been the focus of the New Jersey Department of Environmental Protection ("NJDEP") and EPA's investigations to date.

28. According to the EPA, "[t]he toxicity, mobility and bioaccumulation potential of PFOS and PFOA pose potential adverse effects for the environment and human health." U.S. EPA, (2013).

---

[2] PFOA is sometimes referred to as C8 because it contains eight carbon atoms.

29. PFCs are extremely persistent in the environment and resistant to typical environmental degradation processes. In addition, they are thermally stable synthetic organic contaminants, are likely carcinogenic, and have been shown to correlate with thyroid disease and immune deficiencies. PFCs also have high water solubility (mobility) and low biodegradation (persistence).

30. PFCs have been identified as "emerging contaminants" by the EPA. This term describes contaminants about which the scientific community, regulatory agencies and the general public have a new and increasing awareness or understanding about how they move in the environment or affect public health.

31. PFCs, like other emerging contaminants, have become the focus of active research and study, which means that new information is released periodically regarding the effects on the environment and human health as a result of exposure to the chemicals.

32. In 2006, the NJDEP began its own statewide study of New Jersey water systems to determine the occurrence of PFOA and PFOS in wells and surface waters that are sources of drinking water.

33. Several of NJAW's public water supply systems, including the Penns Grove System, were part of NJDEP's sampling and analysis.

34. In February of 2007, NJDEP recommended that .04 ppb be used as the preliminary health-based guidance level for PFOA in drinking water.

35. In order to develop the guidance level, the NJDEP used a risk assessment approach to evaluate the health effects associated with exposure.

36. NJDEP concluded that, based upon information available at that time, the .04 ppb drinking water concentration was expected to be protective for both non-cancer effects and

cancer at the one-in-one-million risk level. The NJDEP also noted that it would continue to re-evaluate the guidance level of .04 ppb as further study and understanding of the impacts from PFOA were developed.

37. As a result of its additional testing and study, in 2016 the NJDEP proposed a Health Based Maximum Contaminant Level ("MCL") of .014 ppb for PFOA.

38. The .014 ppb level proposed by the NJDEP was subjected to public notice and comment and was adopted on November 1, 2017.

39. The NJDEP also concluded that the detection values of PFOAs and PFOSs where found together should be combined given that their adverse effects are additive.

40. In connection with its emerging contaminant studies, EPA implemented an Unregulated Contaminant Monitoring Rule Number 3 in 2012 ("UCMR 3"), which was designed to collect nationwide information regarding the occurrence of PFC contamination in the public's water supply.

41. UCMR 3 required sampling of Public Water Systems ("PWSs") serving more than 10,000 people (i.e., large systems) and 800 representative PWSs serving 10,000 or fewer people (i.e., small systems) for 21 chemicals, including a number of PFCs, during a twelve month period from 2013 through 2015.

42. In 2015, NJAW participated in the UCMR 3 sampling for its facilities that serve more than 10,000 people. The Penns Grove System is one of those facilities.

43. The results of UCMR 3 demonstrate the presence of PFCs in groundwater at various locations throughout New Jersey, revealing in particular, high levels of PFOA in proximity to the Chambers Works facility.

44. Sampling under UCMR 3 utilized higher reporting limits than would be applicable in light of scientific information and guidance levels developed since that time, which are much lower than those employed in 2008 and 2009. As such, the results of the sampling conducted pursuant to USMR 3 present a more conservative picture of the presence of PFCs under more recent guidelines.

45. In addition, the UCMR 3 sampling effort did not combine PFC levels, thus not taking into account added effects from the presence of more than one PFC.

46. EPA studies have indicated that exposure to PFOA and PFOS over certain levels can result in adverse health effects, including but not limited to developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).

47. In January of 2009, the EPA established a drinking water Provisional Health Advisory Level ("HAL") for PFOA and PFOS, the two PFC compounds about which it had the most toxicological data. EPA set the Provisional HAL at 0.4 parts per billion (ppb) for PFOA and 0.2 ppb for PFOS.

48. In 2016, following additional study, the EPA lowered the HAL for PFOS and PFOA. EPA established the HAL of .07 ppb.

49. In addition, EPA, in issuing its 2016 HALs, like the guidance levels in New Jersey, directs that when both PFOA and PFOS are found in drinking water, the *combined* concentrations of PFOA and PFOS should be compared with the .07 parts per billion health advisory level.

50. Additional PFCs for which there is currently less scientific information include:

a. PFHxS Perfluorohexane sulfonate

b. PFOSA Perfluorooctane sulfonamide

c. PFNA Perfluorononanoate

d. PFDeA Perfluorodecanoate

e. Et-PFOSA-AcOH 2-(N-ethyl-perfluorooctane sulfonamido) acetate

f. Me-PFOSA-AcOH 2-(N-methyl-perfluorooctane sulfonamido) acetate.

51. While more studies have been conducted, and thus, more is known regarding PFOS and PFOA, all PFCs have generally demonstrated similar characteristics to PFOS and PFOA.

52. Although some PFCs have been shown to break down, the resulting products typically end at non-biodegradable PFOA and PFOS.

53. The EPA acknowledges that the studies associated with PFCs are ongoing, and as such, the HALs may be adjusted based upon new information.

54. At least two states, Vermont and New Jersey, have already adopted limits on PFCs that are lower than the current EPA HALs.

55. As manufacturers, handlers and dischargers of PFCs, Defendants knew or should have known that the inclusion of PFCs in any products presented an unreasonable risk to human health and the environment.

56. Defendants knew or should have known that PFCs are highly soluble in water, highly mobile, extremely persistent, and highly likely to contaminate water supplies if released to the environment.

57. Defendants' prior knowledge of the adverse impacts from PFCs to human health and the environment amounts to reckless disregard to human health and environmental safety.

58. Some of the severe health risks associated with exposure to PFCs (particularly PFOA) were documented as a result of scientific studies following a settlement in 2005 of litigation related to PFC exposure. *Leach et al. v. E. I. du Pont de Nemours & Co. & Lubeck Public Service District,* Case No. 01-C-608 (Wood County W. Va. Cir. Ct.).

59. The class action settlement agreement reached between DuPont and the plaintiffs in the *Leach* matter was approved by the West Virginia court on February 28, 2005 (hereinafter the *Leach* Agreement).

60. The *Leach* Agreement required DuPont to fund a panel of scientists that was directed to study the impact of PFC exposure in relation to certain potential diseases (hereinafter the Science Panel). DuPont and the class action plaintiffs jointly selected "three completely independent, mutually-agreeable, appropriately credentialed epidemiologists" to perform the studies. The Science Panel considered toxicological data in animals, outside epidemiology studies, and four epidemiologic studies conducted by them.

61. In 2011, after seven years, the Science Panel released their findings. The Science Panel studies concluded that exposure to PFOA is a probable cause of six illnesses: high cholesterol, kidney cancer, testicular cancer, thyroid disease, pregnancy-induced hypertension/preeclampsia, and ulcerative colitis.

PENNS GROVE WATER SUPPLY IMPROVEMENTS

62. NJAW is committed to the supply of potable drinking water consistent with federal and state guidelines and requirements.

63. NJDEP confirmed to NJAW in 2008 that the .04 ppb was to be used as preliminary health-based guidance for PFOA in drinking water for the Penns Grove System.

64. The Penns Grove System included two wellfields and initially included two associated treatment plants: Ranney Station and Layton Station.

65. In connection with the PFOA treatment, these wellfields would both be treated at one point (the Ranney treatment plant), as opposed to the two treatments plants that were used formerly.

66. The first phase of this improvement work required construction of an approximately 7,000 foot twelve- inch diameter pipeline that was installed between the two well fields to assist in the reliable provision of potable water. Initially, the main line carried system water from Layton Station to Ranney Station and was later converted to a raw water delivery line when a centralized treatment process was added to the Ranney Station.

67. The Ranney well station has a capacity of approximately 2.4 million gallons per day ("gpd").

68. In connection with the sampling of groundwater entering the Penns Grove System treatment plants at the point of entry ("POE"), PFOA was found to be present at levels as high as .10 ppb.

69. NJAW has conducted and continues to conduct sampling, studies and investigations related to PFOA contamination from Chambers Works, which requires funding by

NJAW, including costs for its personnel to supervise the assessments and costs to develop PFOA treatment scenarios and analyze available alternatives.

70. In or around 2009, NJAW began implementing treatment of PFOA at the Penns Grove System which included capital improvement and operation and maintenance measures that continue to this day.

71. NJAW installed Granular Activated Carbon ("GAC") adsorption to reduce and/or remove PFOA contamination at the Penns Grove System's Ranney treatment plant (which now treats source water from both the Ranney and Layton wellfields).

72. NJAW obtained NJDEP approval for the GAC treatment system in connection with PFOA removal.

73. GAC filtration is considered one of the most effective treatment options for the removal of PFOA from water, typically removing more than 90% of PFOA.

74. Based upon sampling following the installation and operation of the GAC filtration system, the occurrence of PFOA in NJAW's Penns Grove System is beneath the .04 ppb guidance level set by NJDEP in 2007.

75. The capital costs associated with installation of the filtration system amounted to more than $4 million, as of July 2017, and included costs for the following: permitting, construction of an operations building for GAC adsorbers as well as the instillation of the adsorbers, installation of a chemical storage and feed facilities, installation of wastewater equalization tanks, upgrade of existing well pumps, installation of additional piping and accessories to connect raw water to treatment system, installation of electrical installations associated with the new treatment facility, and demolition of obsolete equipment/buildings.

76. Replacement of GAC in the filtration system is typically made on a biannual basis and is considered part of the capital cost for the treatment system.

77. The GAC filtration system requires routine operation and maintenance expenditures that include but are not limited to:

a. Potassium hydroxide,

b. Corrosion inhibitors,

c. On site hypochlorite generation power,

d. Salt,

e. Labor, and

f. Filter waste disposal.

78. Annual operating expenses associated with the GAC filtration system to remove PFCs have and will continue to, indefinitely, exceed $240,000 per year.

CAUSE OF ACTION

New Jersey Spill Compensation and Control Act

79. Plaintiff hereby incorporates by reference the allegations contained in paragraphs 1-80 of this Complaint as if they were set forth fully herein.

80. Pursuant to the New Jersey Spill Compensation and Control Act, *N.J.S.A.* 58:10-23.11 *et seq.* (the "Spill Act"), Defendants are responsible for the discharge of hazardous substances into the groundwater that serves as the source for Plaintiff's Penns Grove public water supply system.

81. As a result of discharges at the Defendants' Chambers Works facility, Plaintiff has incurred, and will continue to incur, investigation, cleanup, remediation, and removal costs and damages related to the PFCs discharged by the Defendants.

82. The costs and damages Plaintiff has incurred, and will continue to incur are "cleanup and removal costs" within the meaning of *N.J.S.A.* 58:10-23.11b.

83. Plaintiff is a "person" within the meaning of *N.J.S.A.* 58:10-23.11b who has and is remediating the PFCs discharged by the Defendants.

84. The Defendants, as the dischargers of PFCs that Plaintiff has had to remediate are liable to Plaintiff, under *N.J.S.A.* 58:10-23.11f, without regard to fault, for all investigation, cleanup, remediation, and removal costs and damages that Plaintiff has incurred, and will continue to incur.

PRAYER FOR RELIEF

WHEREFORE, NJAW respectfully requests that this Court:

a. Enter judgment against Defendants determining that their discharges of PFCs are in violation of the Spill Act, thus rendering them liable for contribution and reimbursement to NJAW for cleanup and removal costs and damages incurred and to be incurred to address and remove PFC contamination from the groundwater utilized in the NJAW Penns Grove System;

b. Enter judgment finding Defendants jointly and severally liable for cleanup and removal costs and damages, including but not limited to prior, interim and future capital as well as operation and maintenance costs, including the reasonable costs of assessing injury, destruction or loss resulting from the discharges, and threatened discharges;

c. Award Plaintiff NJAW costs and reasonable attorney fees incurred in prosecuting this action, together with prejudgment interest, to the full extent permitted by law; and,

d. Award Plaintiff NJAW such other relief as this Court deems appropriate.

KEEFE LAW FIRM

Attorneys for the Plaintiff

By: /s/ John E. Keefe Jr.

John E. Keefe, Jr.
Stephen T. Sullivan, Jr.
170 Monmouth Street
Red Bank, New Jersey 07701
(732) 224-9400
(732) 224-9494 (fax)
jkeefe@keefe-lawfirm.com
ssullivan@keefe-lawfirm.com

T. Roe Frazer II (*Pro Hac Motion Forthcoming*)
FRAZER PLC
1 Burton Hills Boulevard, Suite 215
Nashville, Tennessee 37215
(615) 647-0990
roe@frazer.law

Dated: February 27, 2018